| , i  |   |   |                         |  |
|--|---|---|-------------------------|--|
| 0001/PTO<br>Rev. 10/95   | U.S. Department of Commerce<br>Patent and Trademark Office  | Application Number  | 10/826,927              |  |
|  | •   | Filing Date   | April 16, 2004          |  |
| TRANS  | SMITTAL FORM  | First Named Inventor  | Richard Eugene Crandall |  |
| (to be used for all correspondence during pendency of filed application)   |   | Group Art Unit Number   | 2819                    |  |
|  |   | Examiner Name   | Unassigned              |  |
| Total Number of Pa   | ages in This Submission 4 *   | Attorney Docket Number  | 18602-08059 (P3161US1)  |  |
|  | ENCLOSURES  | (check all that appl  | v)                      |  |
| Ch Return Receip Response to N Assignment & Declaration Power of Attor Application Da Information Di Cop Request for C Request for C Amendment/F Afte Status Request | Notice to File Missing Parts Recordation Cover Sheet  rney ata Sheet isclosure Statement & PTO/SB/08A oies of IDS Cited References orrected Filing Receipt orrection of Recorded Assignment Response: [ ] Page(s) | Appeal Commur Interferences Appeal Commur (Appeal Notice, Certified Copy of | raftsperson             |  |
| REMARKS. * Nu  | SIGNATURE OF  | ATTORNEY OR AGE   | NT                      |  |
| Attorney/Reg. No   | Daniel R. Brownstone, Reg. No.  | 46,581  | Dated. 2 1764, 2005     |  |
|  | CERTIFIC  | ATE OF MAILING  |                         |  |

# CERTIFICATE OF MAILING I hereby certify that this correspondence, including the enclosures identified above, is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below. If the Express Mail Mailing Number is filled in below, then this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service pursuant to 37 FR 1.10. Signature: Typed or Printed Name: Daniel Brownstone Dated: 3m4 / , 2005 Express Mail Mailing Number (optional):



#### IN THE UNITED STATES

#### PATENT AND TRADEMARK OFFICE

APPLICANTS:

Richard Eugene Crandall et al.

**APPLICATION NO.:** 

10/826,927

FILING DATE:

APRIL 16, 2004

TITLE:

FAST LOSSLESS ENCODER FOR DIGITIZED ANALOG DATA

**EXAMINER:** 

**UNASSIGNED** 

GROUP ART UNIT:

2819

ATTY. DKT. NO.:

18602-08059 (P3161US1)

## CERTIFICATE OF MAILING I hereby certify that this correspondence, including the enclosures identified above, is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below. If the Express Mail Mailing Number is filled in below, then this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service pursuant to 37 CF/ 1.10. Signature: Typed or Printed Name: Daniel Brownstone Dated: Dated: 7, 2005

MAILSTOP AMENDMENT COMMISSIONER FOR PATENTS P. O. BOX 1450 ALEXANDRIA, VA 22313-1450

### INFORMATION DISCLOSURE STATEMENT Under 37 CFR §§ 1.56 and 1.97-98

SIR:

Fursuant to the provisions of 37 CFR §§ 1.56 and 1.97-98, enclosed herewith is modified form PTO/SB/08A listing references for consideration by the Examiner.

The filing of this Information Disclosure Statement shall not be construed as a representation regarding the completeness of the list of references, or that inclusion of a reference in this list is an admission that it is prior art or is pertinent to this application, or that a search has been made, or as an admission that the information listed is, or may be considered to be, material to patentability, or that no other material information exists, and shall not be construed as an admission against interest in any manner.

This Information Disclosure Statement is being filed before the mailing date of a first office action on the merits.

Enclosed is a copy of each listed reference that may be material to the examination of this application, and for which there may be a duty to disclose.

Applicant submits that no fee is required for the consideration of this Information Disclosure Statement.

Consideration of the listed references and favorable action are solicited.

Respectfully submitted,

RICHARD EUGENE CRANDALL et al

Dated: 3 March , 2005

Daniel R. Brownstone, Reg. No. 46,581

Attorney for Applicants Fenwick & West LLP Silicon Valley Center 801 California Street

Mountain View, CA 94041

Tel.: (415) 875-2358 Fax: (650) 938-5200

PTO/SB/03A (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

|                        | Subs                   | stitute for form 1449A/PTO   | STONE PROPERTY.      | 1              |                         | Complete if Known           |                |
|------------------------|------------------------|--|----------------------|----------------|-------------------------|-----------------------------|----------------|
| INFORMATION DISCLOSURE |                        | Application No. 10/826,927   |                      |                |                         |                             |                |
|                        |                        | Filing Date  |                      | April 16, 2004 |                         |                             |                |
| CTV.                   | STATEMENT BY APPLICANT |  | First Named Inventor |                | Richard Eugene Crandall |                             |                |
| SIA                    | I MIAII                | LINI DI AFFEIC   | WIA I                | Art Ur         | nit                     | 2819                        |                |
|                        |                        |  |                      | Exam           | iner Name               | Unassigned                  |                |
| Sheet                  |                        | 1 of   | 1                    | Attorn         | ey Docket Number        | 18602-08059US (P3161US1)    |                |
|                        |                        | , .  |                      | •              | •                       | •                           |                |
|                        |                        |  | U.S.                 | PATE           | NT DOCUMENTS            |                             |                |
|                        |                        | Document No.   |                      |                |                         | <del></del>                 |                |
| Examiner               | Cite                   | Number – Kind Code <sup>2</sup> (if  | Date                 |                |                         | Name of Patentee or         |                |
| Initials*              | No.1                   | known)   | MM-DD-YY             | YY             |                         | Applicant of Cited Document |                |
|                        | A1                     | US-6,137,533   | 10-24-20             | 1-24-2000 Azim |                         |                             |                |
|                        | A2                     | US-6,486,504   | 11-26-20             | 02             | Guidash                 |                             |                |
|                        | А3                     | US-6,549,235   | 04-15-20             | 03             | Fossum, et al.          |                             |                |
|                        |                        |  |                      |                |                         |                             |                |
|                        |                        |  | FOREI                | GN PA          | TENT DOCUMENTS          |                             |                |
|                        | 1                      | Foreign Patent Document  | 1                    |                |                         |                             |                |
| Examiner               | Cite                   | Country Code <sup>3</sup> – Number <sup>4</sup><br>Kind Code <sup>5</sup> (if known) | Publication          | Date           |                         | Name of Patentee or         | T <sup>6</sup> |
| Initials*              | No.1                   | Kind Code⁵ (if known)  | MM-DD-YY             | ΥY             | Ap                      | pplicant of Cited Document  |                |
|                        | B1                     | EP1206119A2  | 05-15-20             | 02             | Eastman Kodak Co        | ompany                      |                |
|                        |                        |  |                      |                |                         |                             |                |
|                        |                        | OTHER REFE   | RENCES -             | <u>- NON-</u>  | PATENT LITERATU         | RE DOCUMENTS                |                |

|                       |   | OTHER REFERENCES - NON-PATENT LITERATURE DOCUMENTS   |                |
|-----------------------|---|--|----------------|
| Examiner<br>Initials* | Cite<br>No. <sup>1</sup>  | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T <sup>6</sup> |
|                       | C1  | Crandall, R. E. and Klivington, J. 1999, Vector implementation of multiprecision arithmetic,   |                |
|                       |   | Advanced Computation Group, Apple Computer (25 October), pages 1-15.   |                |
|                       | C2  | Crandall, R. E. 2000, PowerPC G4 for Engineering, Science, and Education, Advanced   |                |
|                       |   | Computation Group, Apple Computer, pages 1-12.   |                |
|                       | C3  | JJ2000, An Introduction to JJ2000 Software, Tutorials, pages 1-12,   |                |
|                       |   | http://jj2000.epfl.ch/jj_tutorials/jj2000/index.html, visited August 21, 2003.   | <u> </u>       |
|                       | C4  | A. Kiely and M. Klimesh, "Generalized Golomb Codes and Adaptive Coding of Wavelet-   |                |
|                       |   | Transformed Image Subbands" IPN Progress Report 42-154, April 15, 2003, pages 1-12   |                |
| C5                    | Nasir Memom and Xiaolin Wu, "Recent Developments in Context-Based Predictive Techniques |  |                |
|                       |   | for Lossiess Image Compression," The Computer Journal, Vol. 40, No. 2/3, 1997, pages 127-  | !              |
|                       |   | 1 130.   |                |
|                       | US  | Giovanni Motta, et al. "Lossless Image Coding via Adaptive Linear Prodiction and Classification,"  |                |
|                       |   | Proceedings of the IEEE, Vol. 88, No. 11, November 2000, pages 1790-1796.  | İ              |
|                       | C7  | Shantanu D. Rane and Guillermo Sapiro "Evaluation of JPEG-LS, the New Lossless and   |                |
|                       |   | Controlled-Lossy Still Image Compression Standard, for Compression of High-Resolution  |                |
|                       |   | Elevation Data, IEEE Transactions of Geoscience and Remote Sensing, Vol. 39, No. 10,   |                |
|                       | Ì   | October 2001, pages 2298-2306.   | İ              |
| C8                    |   | M. Weinberger, G. Seroussi, G. Sapiro, "The LOCO-I Lossless Image Compression  |                |
|                       |   | Algorithm: Principles and Standardization into JPEG-LS", Hewlett-Packard   |                |
|                       |   | Laboratories Technical Report No. HPL-98-193R1, November 1998, revised October   |                |
|                       |   | 1999. IEEE Trans. Image Processing, Vol. 9, August 2000, pp.1309-1324.   |                |

| Examiner<br>Signature |     | Date<br>Considered |   |
|-----------------------|-----|--------------------|---|
| f                     | l l |                    | 1 |

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&#</sup>x27;Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.